Product Evaluation

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: EC-89

Effective Date: November 1, 2016
Re-evaluation Date: March 2019

Product Name: A-12 24-Gauge Steel Concealed Fastener Soffit and Wall Panels Installed over Steel Girts

Manufacturer: Alliance Steel
3333 South Council Road
Oklahoma City, OK 73179
(405) 745-7500

General Description:
This evaluation report is for A-12 concealed fastener steel soffit and wall panels installed over steel girts. The metal panels are 24-gauge Galvalume coated steel. The metal panels have 12" of coverage. The metal panels have a 1" height. Refer to Figure 2. The metal panels conform to ASTM A792, SS Grade 50 Class 1, with a minimum yield strength of 50 ksi. The metal panels are supplied with an AZ 50 or AZ 55 aluminum zinc alloy coating. The metal panels can be supplied painted with siliconized polyester products or with Fluropon paint systems.

Limitations:
Framing: The metal panels must be installed over open steel girts using No. 10-16 x1" long self-drilling, self-tapping, pancake head steel screws.

New Framing Attachment: The framing must meet or exceed the wind pressure requirements of the IRC or IBC and must be installed as required for resistance to wind loads.

Design Wind Pressures: The design pressure negative wind load resistance must be as specified in Table 1.

Table 1. Design Pressures and Maximum Girt Spacing

Girts Minimum 16-Gauge (Spacing)	Design Load (psf)
5'-0" o.c.	-40.0
4'-6" o.c.	-44.4
4'-0" o.c.	-48.8
3'-6" o.c.	-53.1
3'-0" o.c.	-57.5
2'-6" o.c.	-61.9
2'-0" o.c.	-66.3
1'-6" o.c.	-70.6
1'-0" o.c.	-75.0

Installation Over an Existing Roof Covering: Not permitted.

Installation:
General: The metal panels must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Steel Purlins: The minimum thickness of steel and the maximum spacing of the purlins must be as specified in Table 1.

Underlayment: N/A.

Attachment of Metal Panels to the Steel Girt: For panel-to-girt attachment, one, No. 10-16 x 1" long self-drilling, self-tapping, pancake head steel screw or one, 1/4-14 x 1" long self-drilling, self-tapping, pancake head steel screw must be provided at each girt. Refer to Figure 1. The fasteners must be long enough to penetrate a minimum of 3 pitches of thread below the steel girt.

Panel Side Laps: Ribs are stitched together with 1/4-14 x 7/8" long Lap Tek self-drilling screws located at 24" on center.

Panel Edges to the Steel Girt: For panel-to-girt attachment, one, No. 10-16 x1" long self-drilling, self-tapping, pancake head steel screw or one, 1/4-14 x 1" long self-drilling, self-tapping, pancake head steel screw must be provided at each girt. Refer to Figure 1. The fasteners must be long enough to penetrate a minimum of 3 pitches of thread below the steel girt.

Trims, Closures, and Accessories: Install components, such as head, jamb, and angle trim as required by the manufacturer.

Note: Keep the manufacturer's installation instructions at the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.

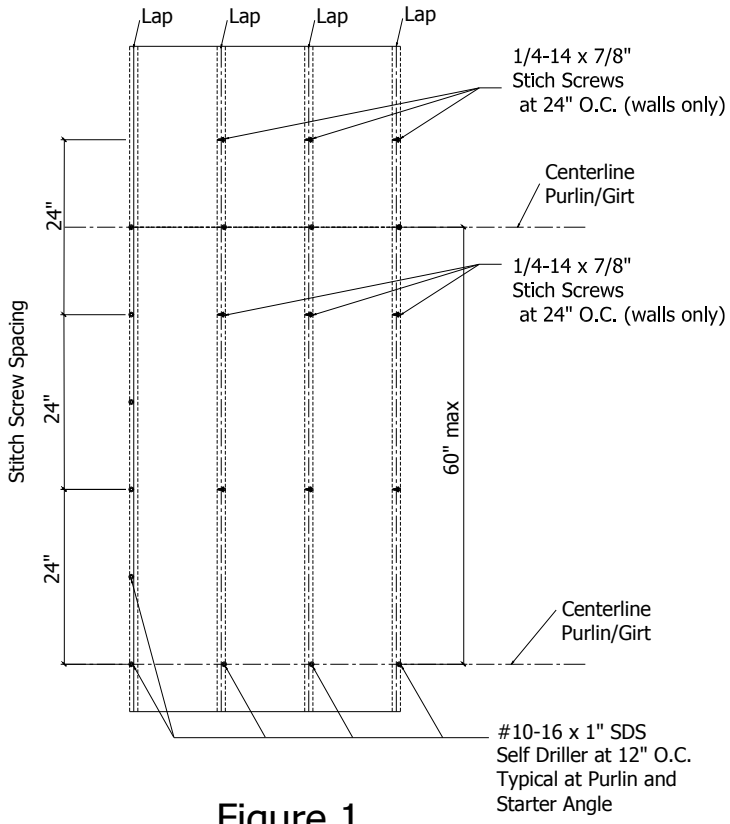

Figure 1

Figure 1. Screw Layout for A-12 Panels

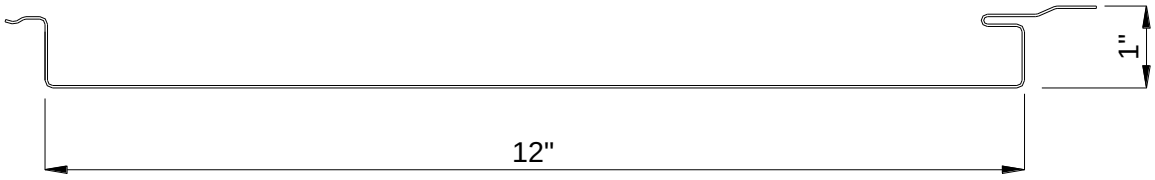

Figure 2. A-12 Panel Profile